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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

SENJU PHARMACEUTICAL CO., LTD., BAUSCH & LOMB INCORPORATED, and BAUSCH & LOMB PHARMA HOLDINGS CORP., Plaintiffs, v. LUPIN, LTD. and LUPIN PHARMACEUTICALS, INC., Defendants.	Civil Action No.: 1:14-cv-00667-JBS-KMW Civil Action No.: 1:14:cv-04149-JBS-KMW Civil Action No.: 1:14-cv-05144-JBS-KMW Civil Action No.: 1:15-cv-00335-JBS-KMW **Opening *Markman* Brief**
INNOPHARMA LICENSING, INC., INNOPHARMA LICENSING, LLC, INNOPHARMA, INC., INNOPHARMA, LLC, MYLAN PHARMACEUTICALS, INC., and MYLAN INC., Defendants.	Civil Action No.: 1:14-cv-06893-JBS-KMW Civil Action No.: 1:15-cv-03240-JBS-KMW **Opening *Markman* Brief**
	Claim Construction Hearing: November 2, 2015

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I. INTRODUCTION

Pursuant to this Court's Amended Scheduling Order dated July 28, 2015 (D.I. 63 in Case No. 14-cv-00667) and Local Patent Rule 4.5(a), Plaintiffs Senju Pharmaceutical Co., Ltd., Bausch & Lomb Incorporated, and Bausch & Lomb Pharma Holdings Corp. (collectively, "Plaintiffs") respectfully submit this opening *Markman* brief concerning the patents-in-suit, U.S. Patent Nos. 8,129,431 ("the '431 patent"), 8,669,290 ("the '290 patent"), 8,754,131 ("the '131 patent"), 8,871,813 ("the '813 patent"), and 8,927,606 ("the '606 patent"). (Ex.[1] 1; Ex. 2; Ex. 3; Ex. 4; Ex. 5.)[2] The patents-in-suit disclose and claim, *inter alia*, aqueous liquid preparations of bromfenac for ophthalmic administration and methods of treatment using these formulations.

The patents-in-suit cover and are listed in the FDA's Orange Book for Prolensa®, an ophthalmic bromfenac (0.07%) solution approved for the treatment of postoperative inflammation and reduction of ocular pain in patients who have undergone cataract surgery. (Ex. 6.) Prolensa® received FDA approval in April 2013, and immediately garnered acclaim in the medical community based on highly favorable clinical study data demonstrating "the benefits of the new formulation." (Ex. 7.)

Seeking to capitalize on Prolensa®'s success, Defendants Lupin, Ltd. and Lupin Pharmaceuticals Inc. (collectively, "Lupin") and InnoPharma Licensing, Inc., InnoPharma Licensing, LLC, InnoPharma, Inc., and InnoPharma, LLC (collectively, "InnoPharma") (together, "Defendants"), as well as four other generic companies, submitted Abbreviated New Drug Applications ("ANDAs") requesting FDA approval for the commercial marketing of exact generic copies of Prolensa® before the expiration of the patents-in-suit. (Exs. 8-21.) Defendants

[1] "Ex. __" refers to the exhibits to the declaration of Bryan Diner in support of Plaintiffs' Opening *Markman* brief.

[2] The '431, '290, '131, '813, and '606 patents all claim priority to a common application and have essentially the same specifications.

have each infringed at least one claim of each of the patents-in-suit by submitting their ANDAs with so-called Paragraph IV certifications, seeking to market infringing generic bromfenac ophthalmic solutions, before the patents-in-suit have expired. 35 U.S.C. § 271(e)(2)(A).

In their letters notifying Plaintiffs under 21 U.S.C. § 355(j)(2)(B)(ii) and 21 C.F.R. § 314.95 of their infringing ANDA submissions ("Paragraph IV Notice Letters"), which by statute are required to provide "a detailed statement of the factual and legal basis" for Defendants' challenges against the patents-in-suit, Defendants offered no non-infringement arguments for most or all of the patent claims. (Exs. 8-16.) Now that these infringement cases have reached the claim construction phase, however, Lupin and InnoPharma have abandoned their previous positions and raised new litigation-induced disputes as to the construction of numerous terms and phrases in the claims of the patents-in-suit, in an apparent effort to evade liability for their willfully infringing actions.

For all of the patents-in-suit, Plaintiffs notified Defendants that they do not believe any claim terms or phrases should be interpreted contrary to their plain and ordinary meaning or require express construction by the Court. (Ex. 22; Ex. 23; Ex. 24; Ex. 25; Ex. 26.) Defendants, however, have raised claim construction disputes with respect to several claim terms and phrases of the patents-in-suit, arguing that "sodium edetate" and "EDTA sodium salt," "stable" and "in an amount sufficient to stabilize said first component," "consisting essentially of" and "consists essentially of," and "satisfies the preservative efficacy standard of US Pharmacopoeia as follows: . . . ." all require construction by the Court. (D.I. 74-1.) Plaintiffs disagree that any of the terms or phrases identified by Defendants require construction by the Court and respectfully submit that they should be given their plain and ordinary meaning as understood by a person of ordinary skill in the art at the time of invention, consistent with the intrinsic record. (*Id.*)

To the extent that the Court determines that any of these terms or phrases requires construction, Plaintiffs have proposed constructions consistent with their plain and ordinary meaning to a person of ordinary skill in the art. For "sodium edetate" and "EDTA sodium salt," Plaintiffs propose that these phrases mean a sodium salt of ethylenediaminetetraacetic acid (EDTA), encompassing, for example, the disodium salt of EDTA. This meaning is consistent with the claim language, specification and file history, as well as with how both Lupin and InnoPharma have construed these claim phrases before the Patent Office as encompassing at least disodium edetate. (Ex. 27 at ¶¶ 80-82; Ex. 28 at 37, 59; Ex. 29 at 63.) And InnoPharma expressly took this same position in its Paragraph IV Notice Letter regarding the '431 patent, construing "EDTA sodium salt" to read on disodium edetate. (Ex. 13 at 119-20.) Notwithstanding Defendants' previous acknowledgement of the plain and ordinary meaning of these phrases, Defendants now argue that these phrases should be construed as encompassing only EDTA tetrasodium salt or tetrasodium edetate. (D.I. 74-1.) As discussed further below, the intrinsic evidence, including the claims, specification and prosecution history, do not support Defendants' proposed construction of these phrases.

The term "stable" and the phrase "in an amount sufficient to stabilize said first component" also have clear meanings to a person of ordinary skill in the art based on the claims and specification. In the claims of the patents-in-suit, the term "stable" is used, generally speaking, to describe "a stable aqueous liquid preparation," and the phrase "in an amount sufficient to stabilize said first component" is used, generally speaking, to describe the amount of tyloxapol sufficient to stabilize bromfenac in particular. (Exs. 2-5.) The specification describes several studies showing tyloxapol's unexpected ability to chemically stabilize bromfenac from degradation, resulting in a stable formulation within a pH range that is non-irritating to the eyes,

such that preservative effect can be maintained for a long time for shelf stability. (Ex. 1 at 2:34-47.) Accordingly, a person of ordinary skill in the art would have understood the term "stable" to mean having sufficient resistance to degradation and having sufficient preservative efficacy to be formulated and maintained for ophthalmic use," and the phrase "in an amount sufficient to stabilize said first component" to mean an amount sufficient to confer sufficient resistance to degradation to be formulated and maintained for ophthalmic use. These meanings are consistent with the specification and how courts have construed "stable" and similar claim language in other cases. Yet Defendants have failed to propose any meaning for this term and phrase, instead arguing that they are indefinite. (D.I. 74-1 at 5, 8.) As discussed further below, these claims are not indefinite, as a person of ordinary skill in the art could readily ascertain the scope of the claims with reasonable certainty based on the intrinsic record.

With respect to "consisting essentially of" and "consists essentially of," Plaintiffs and Defendants do not dispute the well-recognized legal meaning of these phrases. It is firmly established that these transition phrases[3] are partially closed-ended, including within the scope of the claim only the specified materials and those that do not materially affect the basic and novel characteristics of the claimed subject matter. The parties dispute, however, whether these transition phrases permit inclusion of any additional active ingredients besides bromfenac. The prosecution history makes clear these transition phrases, as used in the claims of the patents-in-suit, exclude at least any additional active ingredients other than bromfenac. InnoPharma explicitly agreed in its Paragraph IV Notice Letter and Local Patent Rule contentions regarding the '431 patent, stating that claims 1 and 18 of the '431 patent, which recite "consisting essentially of" as a transition phrase, "exclud[e] other active ingredients other than bromfenac."

[3] Transition terms or phrases connect the preamble of the claim to the body of the claim.

(Ex. 13 at 104, 119; Ex. 30 at 23.) Lupin, on the other hand, has taken the position that unidentified active ingredients are permitted (Ex. 31 at 8-9), but as discussed further below, such an interpretation is inconsistent with the intrinsic record.

Finally, the phrase "satisfies the preservative efficacy standard of US Pharmacopoeia as follows: . . . ," which is found only in claims 25-29 of the '131 patent, reflects a simple error, the proper correction of which is not subject to reasonable debate based on consideration of the claim language and the specification by a person of ordinary skill in the art. The standard recited in the claims themselves and the specification makes clear that these claims should read "satisfies the preservative efficacy standard of EP-criteria B of the European Pharmacopoeia as follows: . . . ," an error the Court may correct through claim construction. The prosecution history does not suggest a different interpretation, and in fact, similar claims in the '290 and '606 patents recite EP-criteria B, consistent with the listed standards and specification. Defendants argue that this error makes these claims indefinite, but where, as here, the claims are subject to only one reasonable interpretation, correction of the claims is appropriate.

Accordingly, and as discussed further below, Plaintiffs respectfully request that the Court adopt Plaintiffs' proposed constructions.

II. BACKGROUND

A. The Disclosure and Claims of the Patents-in-Suit

The '431, '290, '131, and '813 patents disclose and claim formulations of bromfenac for ophthalmic administration, and the '606 patent discloses and claims methods of treatment using these formulations. (Ex. 32 at ¶¶ 18-129.) In the claimed formulations and methods, tyloxapol unexpectedly chemically stabilizes bromfenac from degradation, resulting in a stable formulation within a pH range that is non-irritating to the eyes, such that preservative effect can be maintained for a long time for shelf stability. (Ex. 1 at 2:34-47; Ex. 32 at ¶ 158.)

The patents-in-suit cover and are listed in the FDA's Orange Book for Prolensa®, an ophthalmic bromfenac (0.07%) solution approved for the treatment of postoperative inflammation and reduction of ocular pain in patients who have undergone cataract surgery. (Ex. 6.) Prolensa® received FDA approval in April 2013, and immediately garnered acclaim in the medical community based on highly favorable clinical study data demonstrating "the benefits of the new formulation." (Ex. 7.)

Claim 1 of the '290 patent, which is an exemplary independent claim at issue, states as follows:

> 1. A stable aqueous liquid preparation comprising: (a) a first component; and (b) a second component; wherein the first component is 2-amino-3-(4-bromobenzoyl)phenylacetic acid[4] or a pharmacologically acceptable salt thereof or a hydrate thereof, wherein the hydrate is at least one selected from a 1/2 hydrate, 1 hydrate, and 3/2 hydrate; the first component is the sole pharmaceutical active ingredient contained in the preparation; the second component is tyloxapol and is present in an amount sufficient to stabilize said first component; and wherein said stable liquid preparation is formulated for ophthalmic administration.

(Ex. 2 at cl. 1.) The patents-in-suit include additional dependent claims that incorporate all the elements of the independent claims from which they depend and add further elements. Claim 7 of the '290 patent, which is an exemplary dependent claim at issue, states as follows:

> 7. The stable aqueous liquid preparation of claim 1, wherein the stable aqueous liquid preparation consists essentially of: (a) 2-amino-3-(4-bromobenzoyl)phenylacetic acid sodium salt, (b) tyloxapol, (c) boric acid, (d) sodium tetraborate, (e) EDTA sodium salt, (f) benzalkonium chloride, (g) polyvinylpyrrolidone, and (h) sodium sulfite, wherein said liquid preparation is formulated for ophthalmic administration, and wherein the concentration of the 2-amino-3-(4-bromobenzoyl)phenylacetic acid sodium salt is from about 0.02 w/v % to about 0.1 w/v %.

(Ex. 2 at cl. 7.)

[4] 2-amino-3-(4-bromobenzoyl)phenylacetic acid is the chemical name for bromfenac.

B. Prolensa® and Defendants' Infringing ANDA Submissions

The commercial product Prolensa,® which is covered by the claims of the patents-in-suit, embodies the real world benefits of the unexpected stabilization conferred by tyloxapol in the claimed formulations and methods. Tyloxapol's stabilization effect permitted formulating Prolensa® at pH 7.8 (Ex. 6 at "Description"), down from pH 8.3 in non-prior art commercially available bromfenac formulations Xibrom® and Bromday® (Ex. 33 at 5; Ex. 34 at 5)—a substantial reduction on a logarithmic scale—and closer to the pH of natural tears (7.4), making it less irritating to the patient.[5] (Ex. 35.) Lowering the pH improved bromfenac's intraocular penetration and permitted a lowering of its concentration (0.07%, down from 0.09% in Bromday®), meaning that Prolensa® advantageously puts less drug in contact with surgically compromised ocular tissue without a reduction in efficacy. (*Id.*)

Recognizing the benefits of tyloxapol in the Prolensa® formulation, and driven by sales of Prolensa® they projected would exceed $100 million annually (*see* Lupin's projections in Ex. 36 at 4), Defendants have sent Notice Letters to Plaintiffs stating under 21 U.S.C. § 355(j)(2)(B)(ii) and 21 C.F.R. § 314.95 that they have submitted ANDAs with Paragraph IV certifications to the FDA, seeking approval to market exact generic copies of Prolensa® before the patents-in-suit expire. (Exs. 8-16.) By seeking approval for the commercial marketing of generic bromfenac ophthalmic solutions before the patents-in-suit expire, Defendants have infringed at least one claim of each of the patents-in-suit. 35 U.S.C. § 271(e)(2)(A).

In Defendants' Paragraph IV Notice Letters, which are required by statute to provide "a detailed statement of the factual and legal basis" for their non-infringement and invalidity allegations, Defendants offered no non-infringement arguments for most or all of the claims of

[5] Unlike Xibrom® and Bromday®, which have the adverse effect of eye irritation, including burning/stinging, Prolensa is non-irritating. (*Compare* Ex. 6 at "Adverse Reactions" to Ex. 33 at "Adverse Reactions" and Ex. 34 at "Adverse Reactions.")

the patents-in-suit. (Exs. 8-16.) Now, however, in a litigation-induced claim construction dispute, Defendants have turned away from the positions they initially took in these cases and instead have chosen to argue that various terms and phrases in the patents-in-suit should not mean what they say but rather should be interpreted in a manner contrary to established Federal Circuit precedent.

C. Claim Phrases Disputed by Defendants

Plaintiffs notified Defendants that Plaintiffs do not believe any claim terms need construction or should be interpreted contrary to their plain and ordinary meaning. (Exs. 22-26.) Nonetheless, Defendants raise several terms and phrases from each of the patent-in-suit that they argue require construction by this Court. Those terms and phrases, whose meaning the parties dispute, are as follows:

Term or Phrase Disputed by Defendants	Patent and Claim Numbers
"EDTA sodium salt"	'431 patent, claim 18; '290 patent, claims 7, 13, 19, and 25; '131 patent, claims 6, 12, 18, and 24; '606 patent, claims 9, 18, and 25.
"sodium edetate"	'431 patent, claims 8, 14, and 17.
"in an amount sufficient to stabilize said first component"	'290 patent, claim 1; '131 patent, claim 1; '813 patent, claim 1; '606 patent, claim 1.
"stable"	'290 patent, claims 1, 7, 8, 10, 13, 14, 19, 20, 22, 25; '131 patent, claims 1, 6, 7, 9, 12, 13, 18-22, 24; '813 patent, claims 1, 7, 9, 13, 19-21; '606 patent, claims 1, 9, 11, 12, 18, 19, 25, 26.
"consisting essentially of"	'431 patent, claims 1 and 18; '813 patent, claims 1, 7, and 13.
"consists essentially of"	'290 patent, claims 7, 13, 19, and 25; '131 patent, claims 6, 12, 18, and 24; '606 patent, claims 9, 18, and 25.
"satisfies the preservative efficacy standard of US Pharmacopoeia as follows: viable cell counts of bacteria (S. aureus, P. aeruginosa) 24 hours and 7 days after inoculation decrease to not more than 1/10 and not more than 1/1000, respectively, and thereafter, the cell count levels off or decreases; and viable cell count of	'131 patent, claims 25-29.

fungi (C. albicans, A. niger) 14 days after inoculation decreases to not more than 1/10, and thereafter, the cell count keeps the same level as that of 14 days after inoculation."	

III. ARGUMENT

A. Legal Standards

The words of a patent claim "are generally given their ordinary and customary meaning." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*). Indeed, it is "unjust to the public, as well as an evasion of the law, to construe [a patent claim] in a manner different from the plain import of its terms." *Id.* "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention; i.e., as of the effective filing date of the patent application." *Id.* at 1313; *see also ResQNet.com, Inc. v. Lansa, Inc.*, 346 F.3d 1374, 1378 (Fed. Cir. 2003) ("Indeed, normal rules of usage suggest a 'heavy presumption' that claim terms carry their accustomed meaning in the relevant community at the relevant time."). "Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1313.

Patent "claims, of course, do not stand alone." *Id.* at 1315. "Rather, they are part of a fully integrated written instrument, consisting principally of a specification that concludes with the claims." *Id.* (quotation omitted). "For that reason, claims must be read in view of the specification, of which they are a part." *Id.* (quotation omitted). The Federal Circuit has held that the specification "is always highly relevant to the claim construction analysis" and "it is the single best guide to the meaning of a disputed term." *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Indeed, the Federal Circuit has held that the

construction of a claim term must be "consistent with the specification." *See, e.g.*, *Vitronics*, 90 F.3d at 1583; *Nystrom v. Trex Co., Inc.*, 424 F.3d 1136, 1147 (Fed. Cir. 2005) (adopting the definition of the claim term that was "consistent with the specification" of the patent); *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1207 (Fed. Cir. 2002) ("This plain meaning is consistent with the specification of the '481 and '561 patents.").

"A court 'should also consider the patent's prosecution history, if it is in evidence.'" *Phillips*, 415 F.3d at 1317 (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995)). The prosecution history "contains the complete record of all the proceedings before the Patent and Trademark Office." *Vitronics*, 90 F.3d at 1582. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention . . . ." *Phillips*, 415 F.3d at 1317. Moreover, during prosecution, Examiners, who are considered persons of ordinary skill in the art, *in re Sang Su Lee*, 277 F.3d 1338, 1345 (Fed. Cir. 2002), construe the claims in light of the specification. *See in re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997.)

The intrinsic evidence for patent claim interpretation includes the claim language, specification, and prosecution history. *Phillips*, 415 F.3d at 1317. Although the Federal Circuit has emphasized the importance of intrinsic evidence, courts also may rely on extrinsic evidence, which "consists of all evidence external to the patent and prosecution history," including, for example, expert testimony. *Id*. Extrinsic evidence may be relied on so long as it does not "contradict the meaning of claims discernible from thoughtful examination of the claims, the written description, and the prosecution history—the intrinsic evidence." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999). Expert testimony, in particular, "can be useful to a court for a variety of purposes, such as to provide background on the

technology at issue, to explain how an invention works, to ensure that the court's understanding of technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Philips*, 415 F.3d at 1318. "However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court." *Id*.

Furthermore, "claims should be so construed, if possible, as to sustain their validity." *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed. Cir. 1984); *see also Ortho-McNeil Pharm. Inc. v. Mylan Labs., Inc.*, 348 F. Supp. 2d 713, 723 (N.D.W.V. 2004) ("When a claim term is amenable to two or more interpretations based on the applicable record evidence, it should be construed to preserve the patent's validity.") (citing *Harris Corp. v. IXWS Corp.*, 114 F.3d 1149, 1153 (Fed. Cir. 1997)). Also, courts have considered the stated purpose of the invention in construing disputed claim language. *See, e.g.*, *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) ("The Commission erred in construing the claims as requiring the volume-based method, contrary to the ordinary meaning of the term as reflected in the specification and the testimony, and at odds with the purposes of the invention.").

Patent claims are considered definite if the claims, read in light of the specification and prosecution history, inform, "with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S.Ct. 2120, 2124 (2014). To comply with the definiteness requirement, "the boundaries of the claim, as construed by the court, must be discernible to a skilled artisan based on the language of the claim, the specification, and the prosecution history, as well as her knowledge of the relevant field of art." *Power-One, Inc. v. Artesyn Techns., Inc.*, 599 F.3d 1343, 1350 (Fed. Cir. 2010).

Moreover, a claim term is not indefinite if there is an "obvious and correctable error in the claim, the construction of which is not subject to reasonable debate." *Pfizer Inc. et al. v. Alkem Labs. Ltd., et al.*, No. 13-1110-GMS, slip op. at 4-5 (D. Del. July 22, 2015) (quoting *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011)); *see also Howmedica Osteonics Corp. v. DePuy Orthopaedics, Inc.,* Nos. 11-cv-6498, 11-cv-6499, 11-cv-6500, 11-cv-6511, 2013 WL 3455727 at *25 (D.N.J. July 9, 2013); *Cipher Pharms. Inc. v. Actavis Labs. FL, Inc.*, No. 13-6502, 2015 WL 1768593 at *7 (D.N.J. Apr. 20, 2015). The district court may correct such an error if "(1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest a different interpretation of the claims." *CBT Flint Partners,* 654 F.3d at 1358. This determination is made from the perspective of a person of ordinary skill in the art. *Id.* at 1358-59.

B. A Person of Ordinary Skill in the Art

Claims are to be construed as they would be understood by persons of ordinary skill in the field at the time of invention. *Phillips*, 415 F.3d at 1313. The '431, '290, '131, '813, and '606 patents each claim priority to a Japanese patent application filed on January 21, 2003. (Exs. 1-5.) A person of ordinary skill in the art at that time would have had at least a bachelor's degree in pharmaceutics, pharmaceutical chemistry or a related discipline, and at least some work experience in this area, or a comparable level of education and training. (Ex. 32 at ¶¶ 130-31.)

C. The Court Should Adopt Plaintiffs' Proposed Construction of the Phrases "Sodium Edetate" and "EDTA Sodium Salt"

Defendants dispute the meaning of "sodium edetate" in claims 8, 14, and 17 of the '431 patent and "EDTA sodium salt" in claim 18 of the '431 patent, claims 7, 13, 19, and 25 of

the '290 patent, claims 6, 12, 18, and 24 of the '131 patent, and claims 9, 18, and 25 of the '606 patent. Sodium edetate, which is chemically equivalent to EDTA sodium salt, is a chelating agent. (Ex. 32 at ¶ 134; Ex. 37 at ¶ 13.) Chelating agents are used to strongly bind and sequester certain metal ions in solution. (*Id.*) EDTA is an acronym for ethylenediaminetetraacetic acid or edetic acid, and edetate means ethylendiaminetetraacetate. (Ex. 32 at ¶ 133; Ex. 37 at ¶ 12.) Thus, sodium edetate and EDTA sodium salt mean a sodium salt of ethylenediaminetetraacetic acid. (Ex. 32 at ¶¶ 137-39.) Chemically, EDTA can form four possible sodium salts, including the monosodium salt, disodium salt, trisodium salt and tetrasodium salt. (Ex. 32 at ¶ 136; Ex. 37 at ¶ 14-15.) Accordingly, sodium edetate and EDTA sodium salt encompass, for example, the disodium salt of ethylenediaminetetraacetic acid. (*Id.* at ¶ 137.)

A sodium salt of ethylenediaminetetraacetic acid, which includes the disodium salt, is the plain and ordinary meaning of these phrases to a person skilled in the art, based on the intrinsic evidence, including the claim language itself. Defendants, however, propose the unreasonable construction of "edetic acid tetrasodium salt or tetrasodium edetate," which is contrary to the plain and ordinary meaning of these phrases. (D.I. 74-1 at 1, 3.) Defendants' proposed construction is also inconsistent with the nature and purpose of the claimed subject matter in light of the intrinsic evidence, including the specification and the prosecution history, and extrinsic evidence. For at least these reasons, and as discussed below, Plaintiffs respectfully request that the Court adopt their proposed claim construction.

1. Ordinary and Customary Meaning of "EDTA Sodium Salt" and "Sodium Edetate" to a Person of Ordinary Skill in the Art

As discussed above, the phrases "EDTA sodium salt" and "sodium edetate"[6] mean a sodium salt of ethylenediaminetetraacetic acid. These phrases encompass, for example, the disodium salt of ethylenediaminetetraacetic acid. This is the plain and ordinary meaning of these phrases based on the claim language itself.

Plaintiffs' proposed construction of the ordinary and customary meaning of the phrases "EDTA sodium salt" and "sodium edetate" is consistent with and supported by the specification of the patents-in-suit and prosecution history. The specification refers to sodium edetate throughout and nowhere restricts this phrase to the tetrasodium salt, as Defendants arbitrarily propose. (*See, e.g.*, Ex. 1 at 6:26-28, Table 2, Examples 1-3; Ex. 32 at ¶ 141.) In fact, the patented commercial embodiment Prolensa® contains the disodium salt, [----------REDACTED----------]. (Ex. 6 at "Description"; [REDACTED].)

During prosecution, the Patent Examiner made clear that "sodium edetate" and "EDTA sodium salt" encompass disodium edetate. (Ex. 40 at 5; Ex. 32 at ¶ 142.) The Examiner initially rejected claims reciting "sodium edetate" and "EDTA sodium salt" based on the Yanni reference's disclosure of disodium EDTA, stating that Yanni teaches incorporation of "EDTA sodium salt (disodium EDTA)."[7] (Ex. 40 at 5; Ex. 41; Ex. 32 at ¶ 143.) Additionally, as part of the record of the patents-in-suit before the Patent Office, and therefore part of the intrinsic record, *Vitronics*, 90 F.3d at 1582, three separate experts, in declarations accompanying *inter partes*

[6] During prosecution of the '431 patent, the applicants made clear that sodium edetate and EDTA sodium salt are equivalent, stating that "EDTA sodium salt is also known as sodium edetate." (Ex. 38 at 7; Ex. 32 at ¶ 142.) Defendants have not disputed that these phrases are equivalent.

[7] The Applicants overcame this rejection during prosecution.

review (IPR) petitions filed by three separate Defendants[8], including Lupin and InnoPharma, also construed "EDTA sodium salt" to encompass disodium edetate. (*See* Ex. 27 at ¶¶ 80-82; Ex. 28 at 37, 59; Ex. 29 at 63; Ex. 42 at 34, 55; Ex. 43 at 55; Ex. 32 at ¶¶ 144-46.) Specifically, Dr. Lawrence, Lupin's claim construction declarant here and Lupin's declarant in IPR2015-01099, -01097, -01105, and -01100 involving the '290, '131, '813, and '606 patents, respectively, stated that Prolensa® contains "sodium EDTA," citing its package insert, which specifically discloses disodium edetate. (Ex. 27 at ¶ 82; Ex. 6 at 2; Ex. 32 at ¶ 144.) In addition, Dr. Laskar, InnoPharma's expert in IPR2015-00903 and -00902 involving the '431 and '290 patents, respectively, and Dr. Kompella, Metrics, Inc.'s expert in IPR2014-01041 and -01043 involving the '431 and '290 patents, respectively, both stated that "Ogawa Example 6 contains disodium edetate (EDTA sodium salt)." (Ex. 28 at 59; Ex. 29 at 63; Ex. 42 at 55; Ex. 43 at 55; Ex. 32 at ¶¶ 145-46.) Moreover, InnoPharma expressly took this same position in its Paragraph IV Notice Letter regarding the '431 patent, construing "EDTA sodium salt" to encompass disodium edetate. (Ex. 13 at 119-20; Ex. 32 at ¶ 148.)

Although the meaning of "sodium edetate" and "EDTA sodium salt" is clear from the intrinsic record, the extrinsic record, including, for instance, the declaration of Dr. Williams, an expert in pharmaceutical development, also supports Plaintiffs' proposed construction of these phrases. (Ex. 32 at ¶¶ 132-54.) As of the priority date of the patents-in-suit, both the United States Pharmacopeia (Ex. 44) and the Japanese Pharmacopeia (Ex. 45) listed only disodium

[8] Lupin filed IPR2015-01099, -01097, -01105, and -01100 involving the '290, '131, '813, and '606 patents, respectively. InnoPharma filed IPR2015-00903 and -00902 involving the '431 and '290 patents, respectively. Metrics, Inc. filed IPR2014-01041 and -01043 involving the '431 and '290 patents, respectively. Metrics, Inc. was a Defendant in related matter Civil Action No. 14-cv-03962, which has settled with Metrics stipulating to a consent judgment and injunction specifically acknowledging infringement and validity of the patents-in-suit. *See Bausch & Lomb, Inc. et al. v. Metrics, Inc. et al.*, Stipulated Consent Judgment and Injunction, 14-cv-03962 (D.N.J. Jul. 1, 2015) (ECF No. 108).

edetate; neither included tetrasodium edetate. (Ex. 32 at ¶ 147.) The Japanese Pharmacopeia, which is particularly relevant in the context of the patents-in-suit because they claim priority to a Japanese application and have Japanese inventors, uses "EDTA sodium" and "sodium edetate" to describe disodium edetate. (Ex. 45 at 913; Ex. 32 at ¶ 147.) *Phillips*, 415 F.3d at 1316 (looking to what the inventors actually enveloped within their invention in ultimately interpreting the meaning of a term). Both the U.S. Pharmacopeia and Japanese Pharmacopeia are compendia containing monographs or descriptions of pharmaceutical formulation components. (Ex. 32 at ¶ 147.) As Dr. Williams has opined, a person of ordinary skill in the art would have interpreted the inventors to have used these phrases in the patents-in-suit to include at least the excipient listed in these compendia. (*Id*.) Thus, sodium edetate or EDTA sodium salt would at least encompass the disodium salt of EDTA.

Moreover, multiple extrinsic references Defendants have identified actually support Plaintiffs' proposed construction. In the Burdock reference, "EDTA sodium" and "Sodium ethylenediaminetetraacetate" are listed as synonyms for "EDTA, disodium." (Ex. 46 at 916-17; Ex. 32 at ¶ 149.) In addition, the Lanigan reference identifies "EDTA and its salts (known collectively as Edetates). . . " and that tetrasodium EDTA is also known as EDTA disodium. (Ex. 47 at 95, 96-97; Ex. 32 at ¶ 149.) These references identified by Defendants thus support Plaintiffs' position that a person of ordinary skill in the art would have understood sodium edetate to encompass disodium EDTA. (Ex. 32 at ¶ 149.)

This Court, therefore, should adopt Plaintiffs' proposed construction of the phrases "EDTA sodium salt" and "sodium edetate," as it is the ordinary and customary meaning of these phrases to a person of ordinary skill in the art, consistent with and supported by the specification, prosecution history and extrinsic evidence, including Dr. Williams' declaration.

2. Defendant's Construction is Contrary to the Ordinary and Customary Meaning of the Phrases "EDTA Sodium Salt" and "Sodium Edetate"

Despite this clear meaning, Defendants have argued that the phrases "EDTA sodium salt" and "sodium edetate" should be construed to mean "edetic acid tetrasodium salt or tetrasodium edetate." (D.I. 74-1 at 1, 3.) Defendants' position is contrary to the plain and ordinary meaning of these phrases and is inconsistent with the intrinsic record, as discussed above, including the positions both Lupin's and InnoPharma's own experts took before the Patent Office. (*See* Ex. 27; Ex. 28; Ex. 29.) Defendants' conflicting positions before the Patent Office and this Court should not be entertained, even with different claim construction standards in the two proceedings, because even the broadest reasonable interpretation at the Patent Office "must be consistent with the one that those skilled in the art would reach" and must "reasonably reflect the language and disclosure" of the claims, specification, and record before the Patent Office. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015). The same general claim construction principles must be used in both the district court and the Patent Office, interpreting the claims in light of the specification and prosecution history, and on this basis, Defendants cannot credibly arrive at inconsistent positions in the two proceedings. *Id.* (citing *In re Skvorecz*, 580 F.3d 1262, 1267 (Fed. Cir. 2009) ("giving claims their broadest reasonable interpretation . . . does not include giving claims a legally incorrect interpretation.")). And Defendants' position is also inconsistent with InnoPharma's Paragraph IV Notice Letter, which by statute was required to provide "a detailed statement of the factual and legal basis" for their challenges here. *See Takeda Chemical Indus., Ltd. v. Mylan Labs., Inc.*, 549 F.3d 1381, 1387-88 (Fed. Cir. 2008) (sanctioning defendants for shifting arguments in Hatch-Waxman litigation); *see also Yamanouchi Pharm. Co., Ltd. v. Danbury Pharmacal, Inc.*, 231 F.3d 1339, 1347-48 (Fed. Cir. 2000). Defendants' position, moreover, is inconsistent with the extrinsic record, including

references Defendants themselves identified in support of their position. (*See* Ex. 32 at ¶ 149; Ex. 46; Ex. 47.) Thus, this Court should reject Defendants' proposed construction.

D. The Court Should Adopt Plaintiffs' Proposed Construction of "Stable" and "In An Amount Sufficient to Stabilize Said First Component"

Defendants dispute the meaning of "stable" in claims 1, 7-8, 10, 13-14, 19, 20, 22, and 25 of the '290 patent, claims 1, 6-7, 9, 12-13, 18-22, and 24 of the '131 patent, claims 1, 7, 9, 13, and 19-21 of the '813 patent, and claims 1, 9, 11-12, 18-19, and 25-26 of the '606 patent. Defendants also dispute the meaning of "in an amount sufficient to stabilize said first component" in claim 1 of the '290 patent, claim 1 of the '131 patent, claim 1 of the '813 patent, and claim 1 of the '606 patent.

In the claims of the patents-in-suit, the term "stable" is used, generally speaking, to describe "a stable aqueous liquid preparation." (Exs. 2-5.) The separate phrase "in an amount sufficient to stabilize said first component" is used, generally speaking, to describe the amount of tyloxapol sufficient to stabilize bromfenac in particular. (Exs. 2-5.) In the aqueous liquid preparations of the patents-in-suit, tyloxapol unexpectedly and superiorly chemically stabilizes bromfenac from degradation, resulting in a stable formulation within a pH range that is non-irritating to the eyes, such that preservative effect can be maintained for a long time for shelf stability. (Ex. 1 at 2:34-47; Ex. 32 at ¶¶ 158, 170.) Thus, a person of ordinary skill in the art would have understood the term "stable" to mean having sufficient resistance to degradation and having sufficient preservative efficacy to be formulated and maintained for ophthalmic use, consistent with the use of "stable" in the claims to describe the "aqueous liquid preparation" as a whole. A person of ordinary skill in the art would also have understood the phrase "in an amount sufficient to stabilize said first component" to mean an amount sufficient to confer sufficient resistance to degradation to be formulated and maintained for ophthalmic use,

consistent with the use of the phrase in the claims to describe the amount of tyloxapol sufficient to stabilize and prevent degradation of bromfenac in particular.

The plain and ordinary meaning of these phrases is clear to a person of ordinary skill in the art, based on the claim language itself and the intrinsic evidence. Defendants, however, argue that "stable" and "in an amount sufficient to stabilize said first component" are indefinite. Defendants' position is contradicted by the clear meaning of these phrases conveyed to a person of ordinary skill in the art by the claim language and specification, and is belied by their Paragraph IV Notice Letters as well as the constructions of stable and similar claim language by numerous courts. For at least these reasons, and as discussed below, Plaintiffs respectfully request that the Court adopt their proposed claim constructions.

1. Ordinary and Customary Meaning of "Stable" and "In An Amount Sufficient to Stabilize Said First Component" to a Person of Ordinary Skill in the Art

As discussed above, the term "stable" means having sufficient resistance to degradation and having sufficient preservative efficacy to be formulated and maintained for ophthalmic use. The phrase "in an amount sufficient to stabilize said first component" means an amount sufficient to confer sufficient resistance to degradation to be formulated and maintained for ophthalmic use. These are the plain and ordinary meanings of these phrases based on the claim language itself and the specification.

The term "stable" and similar phrases are often employed in the claims of pharmaceutical formulation patents. Not surprisingly, courts have construed this term and other related phrases in a similar manner that Plaintiffs propose here and have not found anything indefinite about them. For example, in *Cadence Pharm., Inc. v. Paddock Labs. Inc.*, 886 F. Supp. 2d 445, 452 (D. Del. 2012), *aff'd sub nom., Cadence Pharm. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364 (Fed. Cir. 2015), the court construed "stable" as "[t]he active pharmaceutical ingredient does not

decompose substantially such that the formulation has a pharmaceutically acceptable shelf life." Similarly, in *in re Bendamustine Consolidated Cases*, No. 13-2046, 2015 WL 3485926 at *4 (D. Del. May 29, 2015), the court construed the term "stable lyophilized preparation" as "solid material obtained by freezedrying having sufficient stability to have utility as a pharmaceutical product." Additionally, in *in re Research Corp. Techs., Inc.,* No. 97-2836, 1998 U.S. Dist. Lexis 23150 at *33 (D.N.J. Oct. 20, 1998), the court construed the phrase "stabilizing effective amount of a saline or buffer solution" to mean "that the solution contains sufficient chloride or other ions so as to effect some stabilization of the platinum complex against hydrolysis in aqueous solutions." Likewise, in *Rohm & Haas Co. v. Lonza Inc.*, 997 F. Supp. 635, 638 (E.D. Pa. 1998), the court construed "stabilized" to mean "resistant to decomposition, particularly the opening of the isothiazolone ring."

Plaintiffs' proposed constructions for "stable" and "in an amount sufficient to stabilize said first component" are very similar to those adopted by courts that have construed similar claim language. These proposed constructions are further supported by the specification of the patents-in-suit. Experimental Examples 1 and 2, set forth in the specification, demonstrate the resistance to degradation of an aqueous liquid preparation of bromfenac and tyloxapol, and in particular, tyloxapol's ability to stabilize bromfenac from degradation. (Ex. 1 at 7:7 – 8:50; Ex. 32 at ¶¶ 159-61, 171-73.) Experimental Example 3 demonstrates the preservative efficacy of an aqueous liquid preparation of bromfenac and tyloxapol. (Ex. 1 at 8:51 – 10:50; Ex. 32 at ¶ 162.)

Specifically, Experimental Example 1 demonstrates, at the accelerated conditions of 60 °C. for four weeks at the harsh pH 7.0,[9] that a preparation of bromfenac with 0.02 w/v%

[9] A pH of 7, although technically neutral, severely degrades bromfenac, as the Ogawa patent, which is part of the intrinsic record, establishes. (Ex. 48 at 8:1-22 and Table 8; Ex. 32 at ¶ 160, n.5.)

tyloxapol showed 89.6% remaining rate of bromfenac, and a preparation of bromfenac with 0.15 w/v% tyloxapol showed 73.8% remaining rate of bromfenac. (Ex. 1 at 7:7 – 8:2; Ex. 32 at ¶¶ 160, 172.) The remaining rate (%) is the amount of bromfenac remaining in solution and represents a measure of degradation. Based on Experimental Example 1, the Applicants argued, and the Examiner credited in his Notice of Allowance, tyloxapol's unexpected ability to stabilize bromfenac. (Ex. 49 at 3-4.) Experimental Example 2 demonstrates, at the accelerated conditions of 60 °C for four weeks at a pH of around 8.15, that eye drops of bromfenac with 0.02, 0.03, and 0.05 w/v% tyloxapol showed 92.6, 92.0, and 90.9 remaining rate of bromfenac (%). (Ex. 1 at 8:3-50; Ex. 32 at ¶¶ 161, 173.) The specification indicates that these compositions "have sufficient stability for eye drops." (Ex. 1 at 8:43-49.)

Moreover, in Experimental Example 3, eye drops of bromfenac with 0.02 and 0.05 w/v% tyloxapol were shown to be compatible with EP-criteria A and EP-criteria B, respectively, of the European Pharmacopoeia (EP). (Ex. 1 at 9:47-51; Ex. 32 at ¶ 162.) Experimental Examples 1-3 collectively demonstrate the resistance to degradation and preservative efficacy of aqueous liquid preparations of bromfenac and tyloxapol formulated for ophthalmic use. (Ex. 32 at ¶¶ 159-62.)

In addition to the intrinsic record, extrinsic evidence including, for instance, the declaration of Dr. Williams, also supports Plaintiffs' proposed construction of these phrases. Dr. Williams opines that the specification, and particularly Experimental Examples 1-3 discussed above, would have confirmed to a person of ordinary skill in the art the plain meaning of "stable" and "in an amount sufficient to stabilize said first component." (Ex. 32 at ¶¶ 155-77.) As discussed, these examples provide information regarding the resistance to degradation and preservative efficacy of aqueous liquid preparations of bromfenac and tyloxapol useful to a person of ordinary skill in the art in assessing stability. (Ex. 32 at ¶¶ 159-62, 171-73.) Tellingly,

in their Paragraph IV Notice Letters, none of the Defendants except Lupin disputed these plain and ordinary meanings or raised any alleged "indefiniteness" allegations with respect to "stable" or "in an amount sufficient to stabilize." (Exs. 13-21.) *See Takeda*, 549 F.3d at 1387-88 (sanctioning defendants for shifting arguments in Hatch-Waxman litigation); *Yamanouchi*, 231 F.3d at 1347-48.

This Court, therefore, should adopt Plaintiffs' proposed constructions of "stable" and "in an amount sufficient to stabilize said first component," as these are the ordinary and customary meanings of to a person of ordinary skill in the art, consistent with and supported by the specification, prosecution history and extrinsic evidence, including Dr. Williams' declaration.

2. The Phrases "Stable" and "In An Amount Sufficient to Stabilize Said First Component" are Not Indefinite

Despite this clear meaning, and numerous court decisions construing stable and similar claim terms, Defendants now argue that "stable" and "in an amount sufficient to stabilize said first component" should be held indefinite. This is contrary to how courts have considered stable and similar claim terms previously. In *Cadence*, for example, the court found Defendants' contention that "stable is indefinite unavailing," noting that

> [s]pecifically, Defendants contend that the term 'stable' is indefinite because: (1) the patent fails to identify the experimental conditions under which any of the disclosed methods should be used, (2) the patent fails to specify which results would indicate acceptable stability, (3) the patent fails to distinguish the claimed invention, in stability terms, over the prior art, and (4) the patent fails to instruct what methods to use to determine or measure stability. However, 35 U.S.C. § 112 does not require that the patent address these issues in order to be definite.

886 F. Supp. 2d at 452 n.2. A patent need only provide "general guideline and examples" sufficient for a person of ordinary skill in the art to determine the scope of the claims. *N.A. Water Sys., LLC v. Aquatech Int'l Corp.*, No. 10-484, 2012 U.S. Dist. LEXIS 117012 at *47-48 (W.D. Pa. Aug. 20, 2012). It need not provide a narrow definition such that a formulation "can

be instantly classified as 'stable' or 'unstable,'" *Promontory Interfinancial Network, LLC v. Anova Fin. Corp.*, No. 2:13-cv-243, 2014 WL 296423 at *19 (E.D. Va. Jan. 24, 2014), and it need not reference a particular measurement technique or numerical measurement. *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, No. 2014-1370, slip op. at 11 (Fed. Cir. Aug. 7, 2015) ("If such an understanding of how to measure the claimed average pressures was within the scope of knowledge possessed by one of ordinary skill in the art, there is no requirement for the specification to identify a particular measurement technique."); *N.A. Water Sys.*, 2012 U.S. Dist. LEXIS 117012 at *47-48. Accordingly, a claim may be sufficiently definite even if "some degree of testing or experimentation is required to define the boundaries of the claimed invention," which Defendants have not even established is required here. *Advanced Display Sys., Inc. v. Kent State Univ.*, Nos. 3:96-cv-1480, 3:96-cv-1608, 2002 WL 1489555 at *4 (N.D. Tex. July 20, 2002) (holding the claim term "stable" definite even though the patent does not specify how long the cell must remain stable and the patent does not expound on the stability requirement).

As discussed above, the specification of the patents-in-suit, and particularly Experimental Examples 1-3, provides sufficient disclosure regarding stability for a person of ordinary skill in the art to readily ascertain the scope of the claims. The patent provides examples under certain accelerated conditions with varying amounts of tyloxapol. (Ex. 32 at ¶¶ 159-62, 165, 171-73, 176.) A person of ordinary skill in the art could readily use these studies in determining whether a formulation is "stable" or whether tyloxapol is present "in an amount sufficient to stabilize" bromfenac. (*Id.* at ¶¶ 165, 176.) Thus, contrary to Defendants' new litigation-induced position, the claims of the patents-in-suit reciting "stable" and "in an amount sufficient to stabilize" are not indefinite. Defendants' new position is inconsistent with the intrinsic and extrinsic record,

such as Dr. Williams' declaration, and established law. For at least these reasons, Plaintiffs respectfully request that the Court adopt their proposed claim constructions and reject Defendants' indefiniteness position.

E. The Court Should Adopt Plaintiffs' Proposed Construction of the Phrases "Consisting Essentially Of" and "Consists Essentially Of"

Defendants have identified the transition phrases "consisting essentially of" in claims 1 and 18 of the '431 patent and claims 1, 7 and 13 of the '813 patent, and "consists essentially of" in claims 7, 13, 19 and 25 of the '290 patent, claims 6, 12, 18 and 24 of the '131 patent, and claims 9, 18 and 25 of the '606 patent as requiring construction by the Court. Yet there is no dispute between the parties as to the well-recognized legal meaning of these transition phrases that the claim encompasses only the specified materials and other unrecited materials "that do not materially affect the basic and novel characteristic(s)" of the claimed subject matter. *In re Herz*, 537 F.2d 549, 551-52 (C.C.P.A. 1976). The parties do apparently dispute, however, whether these transition phrases permit inclusion of any additional active ingredients besides bromfenac. Based on the intrinsic record including the prosecution history, and as discussed further below, these phrases exclude, for instance, any other active ingredient besides the bromfenac active ingredient recited in the claims. InnoPharma completely agreed with this interpretation, stating that claims 1 and 18 of the '431 patent, which use the transition phrase "consisting essentially of," explicitly "exclud[e] other active ingredients other than bromfenac." (Ex. 13 at 104, 119; Ex. 30 at 23.) Lupin, however, has taken the position that these transition phrases as used in the claims of the patents-in-suit permit inclusion of additional unidentified active ingredients. (Ex. 31 at 8-9.) Lupin's interpretation is inconsistent with the intrinsic record and the prosecution history, as discussed below. For at least these reasons, Plaintiffs respectfully request that the Court adopt their proposed claim construction.

Plaintiffs' proposed construction of the meaning of the phrases "consisting essentially of" and "consists essentially of" is consistent with and supported by the intrinsic record of the patents-in-suit. During prosecution, for example, it was made clear that the use of the transition phrase "consisting essentially of" in the claims explicitly excludes other active ingredients besides bromfenac. The applicants argued (Ex. 50 at 13) and the Examiner accepted (Ex. 51 at 2-10) that "consisting essentially of" excludes unspecified ingredients that materially affect the basic and novel characteristics of the claimed invention (Ex. 50 at 13), identifying the 1B/ID agonist of the Gamache reference as an active ingredient that would so affect the claimed invention and be excluded from the claimed preparations. (Ex. 32 at ¶ 181.) That the Examiner, who is a person of ordinary skill in the art, *in re Sang Su Lee*, 277 F.3d at 1345, similarly understood the transition phrase "consisting essentially of" to exclude other active ingredients is confirmed by the presence of another reference considered during prosecution, USP 6,395,746 to Cagle *et al.*, which the Examiner considered after the amendment adding "consisting essentially of." (Ex. 52; Ex. 53.) Cagle, like Gamache, discloses the inclusion of other active ingredients, but instead of an agonist, it teaches an antibiotic. (Ex. 53.) Yet the Examiner did not reject the claims in view of Cagle, confirming that the Examiner similarly understood the claims to exclude other active ingredients that are not bromfenac. (Ex. 32 at ¶ 182.) InnoPharma has repeatedly and explicitly agreed with this interpretation of the intrinsic record, stating that claim 1 and 18 of the '431 patent "exclud[e] other active ingredients other than bromfenac." (Ex. 13 at 104, 119; Ex. 30 at 23; Ex. 32 at ¶ 184.)

In addition to the intrinsic record, extrinsic evidence including, for instance, the declaration of Dr. Williams, also supports Plaintiffs' proposed construction of these phrases. Dr. Williams opines that the prosecution history, and Applicants' addition of "consisting essentially

of" to overcome the Gamache reference, would have confirmed to a person of ordinary skill in the art that the claims exclude additional active ingredients. (Ex. 32 at ¶¶ 178-85.) Moreover, the Examiner's allowance of the patent claims over the Cagle reference further confirms to a person of ordinary skill in the art that these phrases exclude at least any other active ingredient besides the bromfenac active ingredient recited in the claims. (Ex. 32 at ¶ 182.)

Although Defendants have argued, consistent with Plaintiffs, that the phrases "consisting essentially of" and "consists essentially of" should be construed to include the specified ingredients and additional ingredients that do not materially affect the basic and novel properties of the claimed preparation (D.I. 74-1 at 10), Lupin has taken the position that additional active ingredients are not excluded from the scope of the claims. Lupin argues that the transition phrase "consisting essentially of" in the claims somehow only excludes the 5-HT and IB/ID agonists disclosed in Gamache. (Ex. 31 at 8.) Nothing in the intrinsic record supports Lupin's contrived argument. Neither the specification nor the prosecution history limits the exclusionary scope of this phrase to 5-HT or IB/ID agonists. (Ex. 32 at ¶ 183.) Moreover, Lupin's unsupported proposal ignores that the Examiner did not reject the claims in view of Cagle which, as discussed above, discloses an antibiotic active ingredient rather than 5-HT and IB/ID agonists. (Ex. 53.) There accordingly is no support for the limited exclusion that Lupin unreasonably proposes. Plaintiffs and InnoPharma certainly understand that the prosecution history makes clear that the claims do not include any other active ingredients (Ex. 13 at 104, 119; Ex. 30 at 23), as did the Examiner, who did not reject the claims in view of Cagle. (Ex. 32 at ¶ 182.)

This Court, therefore, should adopt Plaintiffs' proposed construction of the phrases "consisting essentially of" and "consists essentially of." These phrases exclude, for instance, any other active ingredient besides the bromfenac active ingredient recited in the claims." This is the

ordinary and customary meaning of these phrases to a person of ordinary skill in the art, consistent with and supported by the intrinsic record and extrinsic evidence, including Dr. Williams' declaration.

F. The Court Should Adopt Plaintiffs' Proposed Correction of the Phrase "Satisfies the Preservative Efficacy Standard of US Pharmacopoeia as follows: Viable Cell Counts of Bacteria (*S. aureus, P. aeruginosa*) 24 Hours and 7 Days after Inoculation Decrease to Not More than 1/10 and Not More than 1/1000, Respectively, and Thereafter, the Cell Count Levels Off or Decreases; and Viable Cell Count of Fungi (*C. albicans, A. niger*) 14 Days after Inoculation Decreases to Not More than 1/10, and Thereafter, The Cell Count Keeps the Same Level as that of 14 days After Inoculation"

Defendants argue that the phrase "satisfies the preservative efficacy standard of US Pharmacopoeia as follows: viable cell counts of bacteria (*S. aureus, P. aeruginosa*) 24 hours and 7 days after inoculation decrease to not more than 1/10 and not more than 1/1000, respectively, and thereafter, the cell count levels off or decreases; and viable cell count of fungi (*C. albicans, A. niger*) 14 days after inoculation decreases to not more than 1/10, and thereafter, the cell count keeps the same level as that of 14 days after inoculation" in claims 25-29 of the '131 patent is indefinite. This phrase, however, which is only found in certain claims of the '131 patent, contains an error readily apparent from the specification and to a person of ordinary skill in the art, and thus the Court can and should correct this error.

The bacterial and fungi counts recited in the claims 25-29 of the '131 patent correspond directly to EP-criteria B of the European Pharmacopoeia described in the specification of the patents-in-suit, and these same bacterial and fungi counts follow "the preservative efficacy standard of EP-criteria B of the European Pharmacopoeia . . ." in the claims of the '290 patent. This Court can effectively correct claims through claim construction where, as here, the claims are subject to only one reasonable interpretation. Accordingly, and as discussed below, Plaintiffs

respectfully request that the Court adopt their proposed correction of these claims, consistent with the specification.

The phrase "satisfies the preservative efficacy standard of US Pharmacopoeia as follows: . . . ," which is found only in claims 25-29 of the '131 patent, represents a clear error and should be correctly construed to state "satisfies the preservative efficacy standard of EP-criteria B of the European Pharmacopoeia as follows: . . . ," consistent with the specification, the prosecution history, and the '290 and '606 patents. This correction is not subject to reasonable debate based on the recitation of the EP-criteria B bacteria and fungi counts in the specification (Ex. 3 at 9:63-10:49), which is identical to the bacteria and fungi counts recited in claims 25-29 of the '131 patent. (Ex. 32 at ¶ 189.) *CBT Flint Partners*, 654 F.3d at 1358. A person of ordinary skill in the art, considering the claim language and the specification, could arrive at only one interpretation—that there is a readily apparent and correctable error in these claims. (Ex. 32 at ¶ 189.) Moreover, the prosecution history does not suggest a different interpretation, and in fact, supports the conclusion that these claims contain a correctable error. (*Id.* at ¶ 190.) Claims 25-29 of the '131 patent (formerly claims 43-47) were added in a preliminary amendment in their current form (Ex. 54) and were allowed without any amendment. (Ex. 55; Ex. 32 at ¶ 190.) None of the other patents-in-suit in the same family contains this error, and in fact, the '290 and '606 patent claims properly recite "EP-criteria B of the European Pharmacopoeia." (Ex. 2 at cls. 26-30; Ex. 6 at cls. 28-30; Ex. 32 at ¶ 189.)

Although Defendants argue that this simple error makes these claims indefinite, where, as here, "the evidence unequivocally shows what the replacement term should be, the disputed term is not indefinite. Rather, it is a mistake that the Court will correct." *Cipher Pharms.*, 2015 WL 1768593 at *7. Therefore, Plaintiffs respectfully request that the Court construe claims 25-29 of

the '131 patent to correctly recite "EP-criteria B of the European Pharmacopoeia as follows: . . . ," consistent with how a person of ordinary skill in the art would view these claims in light of the specification and prosecution history.

IV. CONCLUSION

For at least the reasons discussed above, Plaintiffs respectfully request that this Court adopt Plaintiffs' proposed construction of the terms "EDTA sodium salt" and "sodium edetate," "stable" and "in an amount sufficient to stabilize said first component," "consisting essentially of" and "consists essentially of," and "satisfies the preservative efficacy standard of US Pharmacopoeia as follows: . . . ."

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Respectfully submitted,

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